As a leader in your organization, you have a responsibility to:

1. [**UNDERSTAND WHICH DECISION-MAKING MEASURES MATTER**](https://www.bigskyassociates.com/blog/5-keys-to-organizational-decision-making), and then
2. [**IMPLEMENT THE DATA COLLECTION SYSTEMS AND PROCESSES**](https://www.bigskyassociates.com/blog/bid/388148/advanced-process-improvement-part-1-data-analysis-decision-making)to inform those decision-making tools.

While metrics may seem difficult to establish – especially for administrative and executive functions – they’re critical to understanding and improving processes and operations within your organization.  
  
Here are the top five most important metrics that should be informing your data-driven decision making process:

**1. Time**

Regardless of industry, every organization operates internal processes (like how long it takes to bring a new employee on board, from the time their application is submitted through their first day of work) and external-facing processes (like how long it takes customer service reps to respond to a troubleshooting request). Measuring the timeline to complete any operational process from start to finish is essential to establishing solid baseline data that can be used to make decisions about things like allocation of resources and human capital. Once you've collected that baseline data, it will be possible to identify prime areas for cycle time reduction and set data-driven goals for improved efficiency in the future.

**2. Errors**

Do you have a good sense of how often recurring mistakes happen in a particular process within your organization? Unless you operate a manufacturing line, it's unlikely that you have been thinking of your operational processes in this way. Measuring the repetition of errors or rework can actually be a straightforward decision-making metric - although in order to capture this data accurately, your organization must have a culture that encourages identifying key risk indicators and then talking about red flags so they can be addressed immediately. Instead of sweeping mistakes under the rug or falling prey to the fallacy that every error was caused by a unique and unrepeatable circumstance, start tracking these occurances.

Once you understand what shape the errors take, and when and where the errors are happening, you will start to see patterns that should lead to questions of *why* they are happening ([MAKE SURE TO DIG DOWN INTO THE ROOT CAUSES!](https://www.bigskyassociates.com/blog/5-tips-to-get-to-the-root-of-your-root-cause-analysis)). Solving problems at the root cause level is the most effective way to reduce or eliminate error altogether.

**3. Cost (All Of It)**

Every organization measures cost, but they usually *only* talk about costs in terms of the budgeting process. To set yourself up to make the best decisions, you should keep tabs on all cost information. Particularly for administrative and knowledge-based functions such as intelligence gathering and analysis, you need to measure where costs are *actually* occurring in each process, broken down by categories such as manpower, time, resources and errors. Your decision-making metrics should also signal when costs are rising or falling. Getting a comprehensive view of costs will help with [DECISIONS ABOUT PROJECT SELECTION](https://www.bigskyassociates.com/blog/project-selection-5-things-every-organization-should-consider), resource allocation, and even suggest priorities for process improvements.

**4. Soft Value**

Soft value metrics are those critical elements of business operations that are often deemed unmeasureable: employee morale, customer satisfaction, leadership alignment, etc. Many executives have a self-limiting belief that soft values simply can’t be measured, so they don’t bother to try. The reality is that soft values can be measured – and should.  
  
Usually, the decision-making metrics for these soft values require a proxy measurement (such as retention rate or survey scores). [YOU CAN BE BOTH STRATEGIC AND CREATIVE ABOUT HOW THIS DATA IS CAPTURED AND ANALYZED](https://www.bigskyassociates.com/blog/bid/372186/The-Data-Analysis-Process-5-Steps-To-Better-Decision-Making); as long as your preferred method provides you with some sort of indicator of how your organization, department, or team is performing in these soft value areas, you will be able to take action accordingly. If you simply ignore soft values because you think they can’t be tracked, you have no basis for improving these values.

**5. Return On Investment**

Particularly in the federal and nonprofit sectors, leaders tend to believe that ROI is a decision-making metric only for private companies with a profit motive. This is simply not true. Any leader in any industry who plans to launch a new program, initiative or process improvement effort must know how much time and money is going to be spent on that project. The benefits and payoff of your new project can only be calculated once you have a threshold of success against which to compare your initial costs.  
  
While it may be acceptable for some agency efforts to simply not *lose* money, most projects (even in the minds of agency leaders) require a return on investment several times over and above the project costs. Remember: When you [CALCULATE THE ROI OF YOUR PROJECTS](https://www.bigskyassociates.com/blog/5-ways-a-cost-analysis-ensures-the-best-return-on-your-investment), you’re able to more robustly defend your budget and secure future funding for your agency’s programs.  
  
Identifying and tracking these decision-making metrics doesn’t have to be a source of distress for your team, especially if you’re willing to put in some effort upfront. With a clear vision of your present performance, you’re empowered to make well-informed decisions for your organization's future.

# 7 Metrics to Help Your Management Team Make Better Decisions

What should be measured in manufacturing? Here are seven general areas with associated key performance indicators …

### Profitability and Cost

The more [profit](https://www.cmtc.com/cmtc_manufacturing_video_gallery/cmtc-creating-solutions-for-manufacturing-growth-and-profitability) a business makes above and beyond the cost of making a product, the better off a business’s cash flow will be. High cash flow is a sign of a healthy business.

**Total Manufacturing Cost per Unit Excluding Materials** measures a given manufactured unit, item or volume via potentially controllable manufacturing costs that go into production.

**Manufacturing Cost as a Percentage of Revenue** -- a ratio of the overall manufacturing expenses to the total revenues produced by a manufacturing plant.

There are several other metrics in this arena that can be measured for manufacturers and every other business, including Earnings Before Interest, Taxes, Depreciation, and Amortization (EBITDA), employee productivity, net operating profit, average unit contribution margin, return on assets, energy cost per unit, cash cycle time and customer fill rate.

### Flexibility and Innovation

Without flexibility, manufacturers cannot be innovative. These work together to keep a business relevant and possibly ahead of the industry as preferences and tastes change over time.

**Engineering Change Order Cycle Time** indicates how fast design modifications to products can be implemented through the documentation process and volume production.

**Rate of New Product Introduction** shows how rapidly new products can be presented to the marketplace. It usuallyfeatures a combination of design, development and manufacturing ramp up times.

Maintenance Reduction

Primarily, this area is concerned with saving time. In manufacturing especially, time is a crucial resource that begs for optimal efficiency. When timing is off in the production and distribution process, it can challenge a business’s existence.

**Percentage Planned vs. Emergency Maintenance Work Orders** is a ratio metric indicating frequency of maintenance scheduled versus disruptive/un-planned maintenance.

**Downtime in Proportion to Operating Time** shows the ratio of downtime to operating time. It’s a direct indicator of asset availability for production.

Inventory Reduction

Have you ever seen a discount store or bargain bin? That’s what manufacturers strive to avoid – being forced to sell their product at a reduced cost. As contemporary tastes come and go as fast as ever, decreasing inventory is a modern trend in manufacturing that has proven to be a good indication of efficiency.

**Work In Process (WIP) Inventory** includes a ratio calculation to measure the efficient use of materials inventoried. It’s solved by dividing the cost of goods sold by the average inventory used to produce those goods.

Customer Experience

Ultimately, here lies the overall win for manufacturing success.

**On-time delivery** looks at time manufacturers deliver completed goods, as scheduled and committed to customers. **Manufacturing cycle time** is the speed or time it takes to procure a product from start to finish. **Changeover time** shows how long it takes to switch a manufacturing line from one product to another.

Quality

How efficient can you be without sacrificing *quality*? Metrics can help you decide.

* **Returns** are a clear indication of customer dissatisfaction. Too many and you know something is wrong.
* **Yield** shows the percentage of products produced correctly the first time around without rework or scrap.
* **Incoming supplier’s quality** is the percentage of good materials incoming to the manufacturing process from a supplier.

Quality, Customer Experience, Innovation & Inventory Reduction: 4 Areas to Measure for Better Decision Making

Overall Efficiency

This is the difference-maker for improving profit. Again, high profit above and beyond the cost of doing business is why every entrepreneur goes into an industry. While we’ve touched on [efficiency](https://www.cmtc.com/blog/bid/149204/How-to-Develop-an-Efficient-Value-Chain-or-System) in other areas, here is a broader perspective on wisely managing resources for an improved profit.

* **Capacity utilization** shows the total output capacity utilized at a given point.
* **Throughput** gives insight for how much is being produced in a stage over a specified period.
* **Production attainment** gives the percentage of time a target level of production is achieved given a time period.
* **Overall Equipment Effectiveness (OEE)** can be figured by Availability x Performance x Quality, which can be used to indicate overall effectiveness for equipment or the entire line.

Some of these measures will be more important to some manufacturers than others. It’ll depend on your industry, size, etc. Management and the business leader(s) will have to review what’s most important and determine a list of metrics to track.